

**Supplemental Specification  
2005 Standard Specification Book**

**SECTION 13561**

**ATMS POWER SERVICE**

**Delete Section 13561 and replace with the following:**

**PART 1      GENERAL**

**1.1      SECTION INCLUDES**

- A.      Materials and procedures for installing a complete electrical power service as shown in the contract. Includes all coordination with the power service provider, wires, surge protection, rigid metal riser, weatherhead, transformer, disconnects, conduit risers and stand-off brackets, breakers, clamps, conduit, junction boxes, grounding materials, duct seal, pull wire, labor, workmanship, equipment, testing, documentation, and incidental items required for a fully operational system.
- B.      Materials and procedures for installing a Power Pole.

**1.2      RELATED SECTIONS**

- A.      Section 02324: Compaction
- B.      Section 13551: General ATMS Requirements

**1.3      REFERENCES**

- A.      ASTM A 123: Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
- B.      ASTM B 117: Operating Salt Spray (Fog) Apparatus
- C.      Electrical Utility Service Equipment Requirements Committee (EUSERC)
- D.      Local utility electric service requirements
- E.      National Electrical Manufacturers Association (NEMA) Standards

- F. National Electrical Code (NEC)
- G. Underwriters Laboratories (UL)

#### **1.4 SUBMITTALS**

- A. In accordance with Section 13551.

### **PART 2 PRODUCTS**

#### **2.1 GENERAL**

- A. Comply with NEC standards, local utility electric service requirements and standards, and Department standards for all electric service products.
- B. Provide approved underground service pedestal. Service Enclosures must be NEMA 3R rated. Refer to NEMA Standards Publication 250-1997.
- C. Use a safety switch as indicated in the contract.
- D. Provide circuit breakers sized as specified in the contract.
- E. Conductors are to be provided as sized and numbered in the contract.
- F. Provide riser and weatherhead in accordance with Department and local utility standards. Refer to SL Series Standard Drawings.
- G. Provide approved blade or breaker disconnects as specified in the contract.
- H. Provide MasterLock P848 Lock (provide two keys per lock to the Engineer), or disposable aluminum lock with break-off screws for all disconnects and service pedestals.
- I. Pole Mount (when approved by the power provider): Refer to SL Series Standard Drawings
  - 1. Service disconnect according to contract.
  - 2. Provide a manual EUSERC approved circuit closing link by-pass release meter socket.
  - 3. Unmetered street lighting circuit.

- J.     Underground Service Pedestal: As specified, ASTM B 117, and ASTM A 123 (Cabinet), UL E 50076.
  - 1.     Enclosure: 0.120 inch galvanized steel or anodized aluminum
    - a.     0.080 inch galvanized steel or anodized aluminum covers
    - b.     Finished surface with an environmental green, baked enamel over zinc-chromate primer as specified, or anodized aluminum: ASTM B 117
    - c.     Bottom access opening
    - d.     EUSERC approved circuit-closing by-pass release meter socket
    - e.     Baffled ventilation louvers
- K.     Circuit Breaker: Main Breaker
  - 1.     Six space metered
  - 2.     Six space unmetered bus
- L.     Detachable, pad-mount base.
- M.     Use copper conductor with stamped “RHH-USE-RHW” or “XHHW” rated insulation for all underground and riser electrical conductors

## **2.2     WOOD POWER POLE**

- A.     Comply with local utility electric service requirements in selecting power pole.

## **PART 3     EXECUTION**

### **3.1     GENERAL**

- A.     Comply with NEC standards, local utility electric service requirements and standards, and Department standards for all electric service installations.
- B.     Install underground service pedestal.
- C.     Coordinate any utility connection with the Engineer and utility company. Contact the Engineer and utility company at least 60 days before the desired connection date.
- D.     Verify the exact location, voltage, procedure, and materials required by the utility company.
- E.     Ground all electrical equipment, including cabinets, metal structures, in accordance with the NEC standards.

- F. Supply all conduit and conductors to power source connection location. The power company makes the final connection.

### **3.2 POWER SERVICE**

- A. Contact the Engineer at least six weeks before power service hookup to coordinate power service connection and to confirm connection date.
- B. The Department will be responsible for all on-going electrical costs.

### **3.3 WOOD POWER POLE**

- A. Install power pole as specified in the contract and in accordance with all Department and local utility standards. Contact the power company ten days before pole installation.
- B. Install wood pole below grade to a minimum depth equal to one-sixth the total pole height.
- C. Increase the installation depth by one pole diameter (measure depth from the down-slope side of the pole) when wood pole is installed on a slope of 2:1 or greater.
- D. Backfill with native material in 1 ft lifts to match surrounding grade. Tamp each lift to at least 90 percent compaction. Follow Section 02324 requirements for poles placed near structures.

END OF SECTION